
The project "TEMPUS - MMATENG"

**BASIC RESULTS OF IMPLEMENTATION OF
COMPETENCE-BASED APPROACH IN THE TEACHING
TECHNICAL DISCIPLINES AT DIRECTION
"MATERIALS ENGINEERING"**

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In the framework of the international TEMPUS project "Modernization of curriculum-level training programme (Bachelors/Masters) with engineering materials based on competence approach and the best experience with the implementation of the Bologna process" (MMATENG) lecturers department Physics of Metal began implementing a competence-based approach to teaching professional disciplines at direction "material engineering".

During the study subjects increased practical orientation to the feed material. Learning, owl in turn, has improved as a result of the use of instant theoretical knowledge to solve the problem.

For example in the discipline "Mechanical properties and structural strength of materials" in teaching the sections relating to constructional strength was offered to students to solve problems to determine the load carrying capacity of structural elements of safe design sizes stress concentrators and so on.

During laboratory work students had to learn not only master the technique of execution tests, but also to learn how to handle the results of the measurements and analyze them.

The execution of the above complex of actions in the process of modernization of each discipline will allowed students to acquire all relevant components of competence - from knowledge to action experience in a particular professional typical situation, the successful solution of which depends on the persistence and drive for results.

Conclusions: the implementation of competence-based approach in the teaching technical disciplines at direction "Materials engineering" at Physics of Metal Department has allowed to raise degree of formation of the corresponding competence for 10-15%.